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EXAMINER

TAMAI, KARL J

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 01/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/856,068

Applicant(s)

BOBZIN, JORG

Examiner

Tamai IE Karl

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 85-121 is/are pending in the application.
- 4a) Of the above claim(s) 87-89, 91, 96-98, 101, 102, 104, 106, 110, 113, and 115-121 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 85, 90, 93-95, 99, 100, 103, 105, 107-109, 111, 112 and 114 is/are rejected.
- 7) ☒ Claim(s) 86, 92 and 114 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 May 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

\* Notice of References Cited (892)

***Election/Restrictions***

1. Applicant's election without traverse of Group I in Paper No. 8 is acknowledged.

***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the air coil folded around the first body with the first and second bodies being connected at outer edges must be shown or the feature canceled from the claim 108. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

*The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.*

6. Claim 108 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The specification does not enable or contain a full, clear, concise, and exact written description of the first and second bodies being connected at the outer edges with the coil folded around the first body. For the purposes of advancing prosecution on the merits the examiner will assume the outer edge of the first and second body is radially adjacent the shaft.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

8. Claim 105 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 105 recites the limitation "the return path flat band". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 85, 90, 93-95, 103, 107-109, and 111 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Oba et al. (Oba)(JP 55-083,449). Oba (figure 7) teaches a motor with an air gap between the flux plates 13 and 14 (second members) mounted on a shaft, with permanent magnets 20a, 20b (first member) mounted between the first members and having a coil bend around the permanent magnet members. The magnetic field extends between the permanent magnet and the flux plates over the entire length of the air gap. Oba teaches a coils which is positioned in parallel air gaps which transition into each other where the coils wrap around the first members and are supported in the folded region of the coil. The second members 13, 14 follow the contour of the conductor at the bend region because the conductor is parallel to the second member. Oba teaches the first and second bodies connected at the outer edge via the shaft 12.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 99 and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oba et al. (Oba)(JP 55-083,449) and Rabe (US 4,763,053). Oba teaches every aspect of the invention except the folded region of the coil being penetrated by a magnetic field. Rabe teaches the folded portion of the coil being swept by a magnetic field/partial pole (see figure 11) to enhance efficiency of the motor. It would have been obvious to a person of ordinary skill in the art to construct the motor of Oba with a magnet over the bent portion, as taught by Rabe, to increase the efficiency of the motor.

13. Claim 105 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oba et al. (Oba)(JP 55-083,449) and Hasegawa et al. (Hasegawa) (US 5,289,069). Oba teaches every aspect of the invention except the flux return plate having permanent magnets. Hasegawa teaches the flux return plate can be either a permanent magnet (figure 10) or a flux return plate (figure 11). It would have been obvious to a person of ordinary skill in the art to construct the motor of Oba with the flux return path of the second member being permanent magnets because Hasegawa teaches the equivalence of the flux return rotor being a magnetic plate or a permanent magnet where it is within the ordinary skill in the art to choose between known equivalents, and because the permanent magnets would provide additional torque to drive the rotor due to the additional magnetic flux.

14. Claim 112 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oba et al. (Oba)(JP 55-083,449) and Oney (US 4,187,441). Oba teaches every aspect of the invention except the multiple stators and rotors. Oney teaches that any number of stators and rotors can be combine to provide a large or small motor. It would have been obvious to a person of ordinary skill in the art to construct the motor of Oba with multiple stator and rotor to provide for large motor applications, and because it has been held that a mere duplication of essential working parts is within the ordinary skill in the art (See *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8).

***Allowable Subject Matter***

15. Claim 86, 92, and 114 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai at (703) 305-7066. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703) 308-1371. Any inquiry of a general nature of this application should be directed to the Group receptionist at (703) 308-0956.

Karl I Tamai  
PRIMARY PATENT EXAMINER  
January 14, 2003

  
KARL TAMAI  
PRIMARY EXAMINER